

Wisconsin SCORP

Regional Demographic Profile

Upper Lake Michigan Coastal



Applied Population Lab and Wisconsin Department of Natural Resources

*Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us*



Preparation of this report and the collaborative research by the Wisconsin Department of Natural Resources, Bureau of Parks and Recreation and the University of Wisconsin - Madison Applied Population Lab was financed in part through a planning grant from the National Park Service, Department of Interior, under the provisions of the Land and Water Conservation Fund act of 1965 (Public Law 88-578, as amended).



Applied Population Lab and Wisconsin Department of Natural Resources

*Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us*



TABLE OF CONTENTS

About this Report	IV
Executive Summary	V
Existing Conditions	
Population Distribution	1
Urban/Rural	3
Housing Distribution	4
Seasonal Housing and Tourism	6
Demographic Characteristics	9
Historical Perspective	16
Population Change	16
Age Structure	19
Net Migration by Age	20
Urbanization	21
Minority Groups	22
Housing Development	23
Seasonal Housing	27
Natural Amenities, Recreation and Population Change	28
Future Trends	30
Population Projections	30
Projected Population Change, 2000-2020	31
Age Projections	32
Conclusions	33



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





ABOUT THIS REPORT

The following is a demographic profile of the Upper Lake Michigan Coastal SCORP Region completed by the Applied Population Laboratory, University of Wisconsin- Madison. This profile was created to inform the 2005-2010 SCORP planning process by providing demographic background information for understanding the context within which outdoor recreation occurs. Similar demographic profiles are provided for each of the eight SCORP Regions, and one summary profile for the state of Wisconsin compares Region to Region.

The profile includes current, past and projected information on population demographics and housing within the Upper Lake Michigan Coastal Region. Data are displayed in maps, tables, and charts and summarized briefly in text. We begin by painting a demographic picture of the current conditions in the Region using data from Census 2000 and from the Wisconsin Department of Administration's Population Estimates (2004). Next, we address historical trends that have shaped the Upper Lake Michigan Coastal Region over the past several decades. We include information on how the population has been changing over time, where housing development has been rapidly occurring, and the impact that natural amenities may have on these changes. Finally, we use population projections from the Wisconsin Dept. of Administration to discuss how the population of the Upper Lake Michigan Coastal Region might change over the next several years.

It is important for planners to consider demographic information when planning for outdoor recreation because characteristics of the population impact demand for different types of outdoor recreation. For instance, areas with growing populations may experience increasing demand for recreational resources, and areas with aging populations may demand different types of resources than those with young populations. Similarly, income, education, race, and sex have all been shown to affect preferences for outdoor recreation.

Starting in 1999, the Wisconsin DNR initiated a three-year study to identify, with considerable input from the public and non-profit groups, places in the state that will be critical in meeting Wisconsin's long-term conservation and recreation needs. The resulting 229 "Legacy Places" collectively are the special places that "make Wisconsin Wisconsin." The WDNR only represents the Legacy Places as points because specifically identifying which lands and waters associated with each place are most appropriate to maintain and protect is most appropriately left to a locally-focused planning process. The Legacy Places are represented on many of the maps that you will see in this report. The points noted with a star in the center are Legacy Places that the WDNR has determined to have particularly high recreation potential. The Land Legacy information helps to bring cultural and environmental meaning to the demographic data that we present.

The principal author of this report is Richelle Winkler (rwinkler@ssc.wisc.edu) of the Applied Population Laboratory, with direction provided by Jeff Prey (Jeff.Prey@dnr.state.wi.us) of the Wisconsin Department of Natural Resources. With appreciation and thanks, the author would like to acknowledge the insight and assistance provided by Chris Whelpley, David Long, Bill Buckingham, Dan Veroff, Nick Fisher, and Don Field. Each lent their skills and talents in preparing data, constructing tables and charts, formatting, and editing text. For more information about this report, the authors can be contacted via email.



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





EXECUTIVE SUMMARY

The Upper Lake Michigan Coastal Region is located in the northeast part of the state and encompasses Brown, Door, Kewaunee, Manitowoc, Marinette, and Oconto Counties. The Region is heavily influenced by Lake Michigan and every county in the Region borders the coast. The Green Bay metropolitan area is located near the geographic center of the Region and it affects much of the surrounding area. The remainder of the Region (especially in the north) is largely rural and sparsely populated.

- In 2004, the Upper Lake Michigan Coastal Region had an estimated population of 453,962 residents, of whom approximately 52% live in Brown County (home to Green Bay).
- The population of the Upper Lake Michigan Coastal Region is mostly urban (about 64%), especially in Brown, Manitowoc, and Marinette Counties.
- 93% of the population is Non-Hispanic and White. There is some Hispanic, Asian, and Native American influence, especially in Brown County.
- The Lake Michigan coastline (especially Door County) and inland lakes and forests in the northern part of the Region attract seasonal residents, tourists, and in-migrating retirees. About 10% of housing units in the Region are for seasonal use, and about 8% of all workers work in a tourism-related industry.
- Families with children are in-migrating into the Region, yet the population remains older, in general, than the state average. Median age for the Upper Lake Michigan Coastal Region in 2000 was about 37 years. The oldest county was Door, with a median age of 43 years. The population is projected to continue to age in the coming years and to reach 39.5 years for the Upper Lake Michigan Coastal Region and 50 years for Door County by 2010.
- In comparison with the rest of the state, people in the Upper Lake Michigan Coastal Region are less educated and have relatively low housing values. Median household income is at about the state average. Education and housing values are highest in the suburbs of Green Bay and in Door County, and are lowest in the northern part of the Region. Median income is highest in the suburbs of Green Bay.
- Population in this Region has been growing since at least 1950, and it grew particularly fast in the 1990s. Between 1950 and 2004 the population increased by 71%. Growth has been especially fast on the outskirts of Green Bay and in Door County.
- Housing development has been occurring at a faster rate than population growth. Between 1950 and 2004, the number of housing units in the Region increased by 160%. Housing development occurred particularly fast in the 1970's (increase of 34% over the decade). Brown, Door, Marinette and Oconto Counties have experienced the fastest rate of housing development in recent years.
- According to Johnson and Beale's recreational county classifications, Door, Marinette, and Oconto Counties have many recreation-based resources and high demand for recreation. Because of these resources, these counties might be expected to experience population growth and housing development at a disproportionately fast pace.
- Population is projected to continue to increase in the Upper Lake Michigan Coastal Region over the next several years, especially in Oconto and Brown Counties. Oconto County is expected to add 5,339 residents between 2004 and 2020, an increase of 14%.



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: *Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us*





POPULATION DISTRIBUTION

According to the Wisconsin Department of Administration population estimates (WDOA 2004), 453,962 people live in the Upper Lake Michigan Coastal Region. This amounts to about 104 persons per square mile.

Figure 1 shows population distribution for the Upper Lake Michigan Coastal Region by county. Most (71%) of the people in the Region live in either Brown or Manitowoc County. Brown County is home to the City of Green Bay. The City of Manitowoc is the largest city in Manitowoc County, with a population of about 35,000.

Figure 1
County Population Distribution, 2004

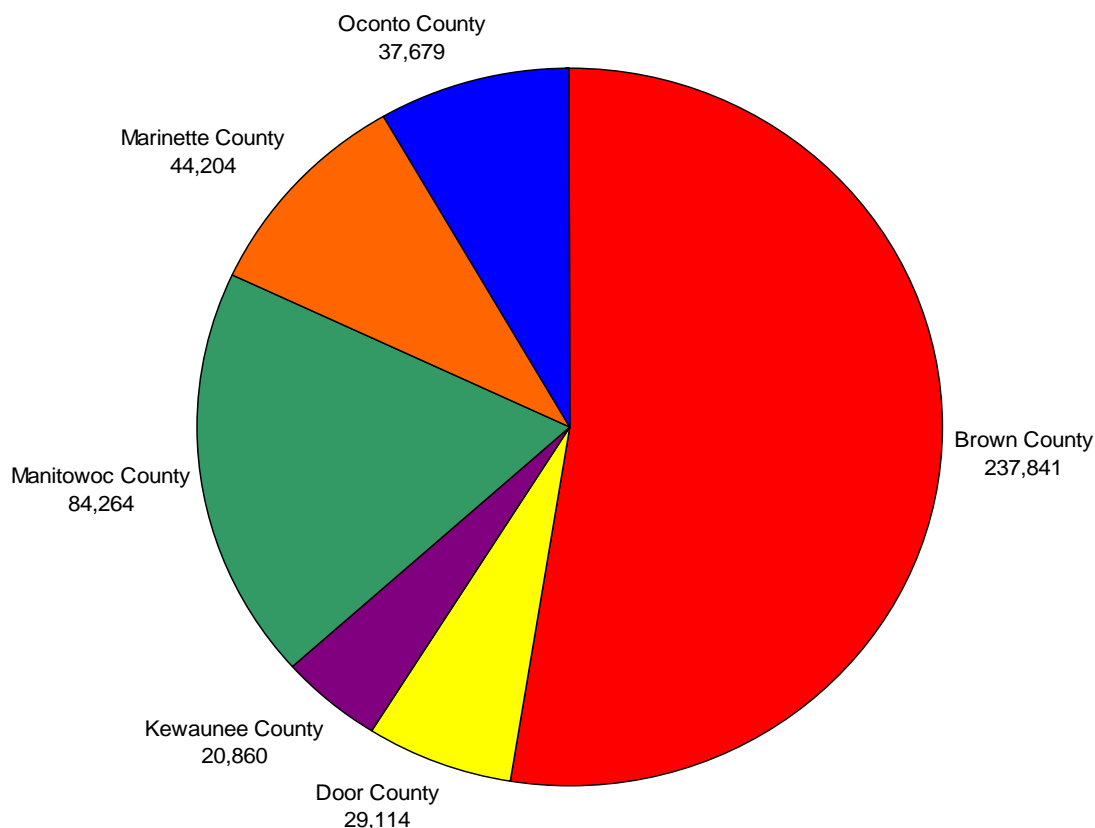


Figure 2 shows population density by municipality (cities, villages, and towns). This view allows us to see variation within counties. The Green Bay area has high population density. The northern part of the Region is made up of low population density towns, scattered with small cities and villages that have higher population densities. Door and Manitowoc Counties are comprised of higher density towns scattered with cities and villages.



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us

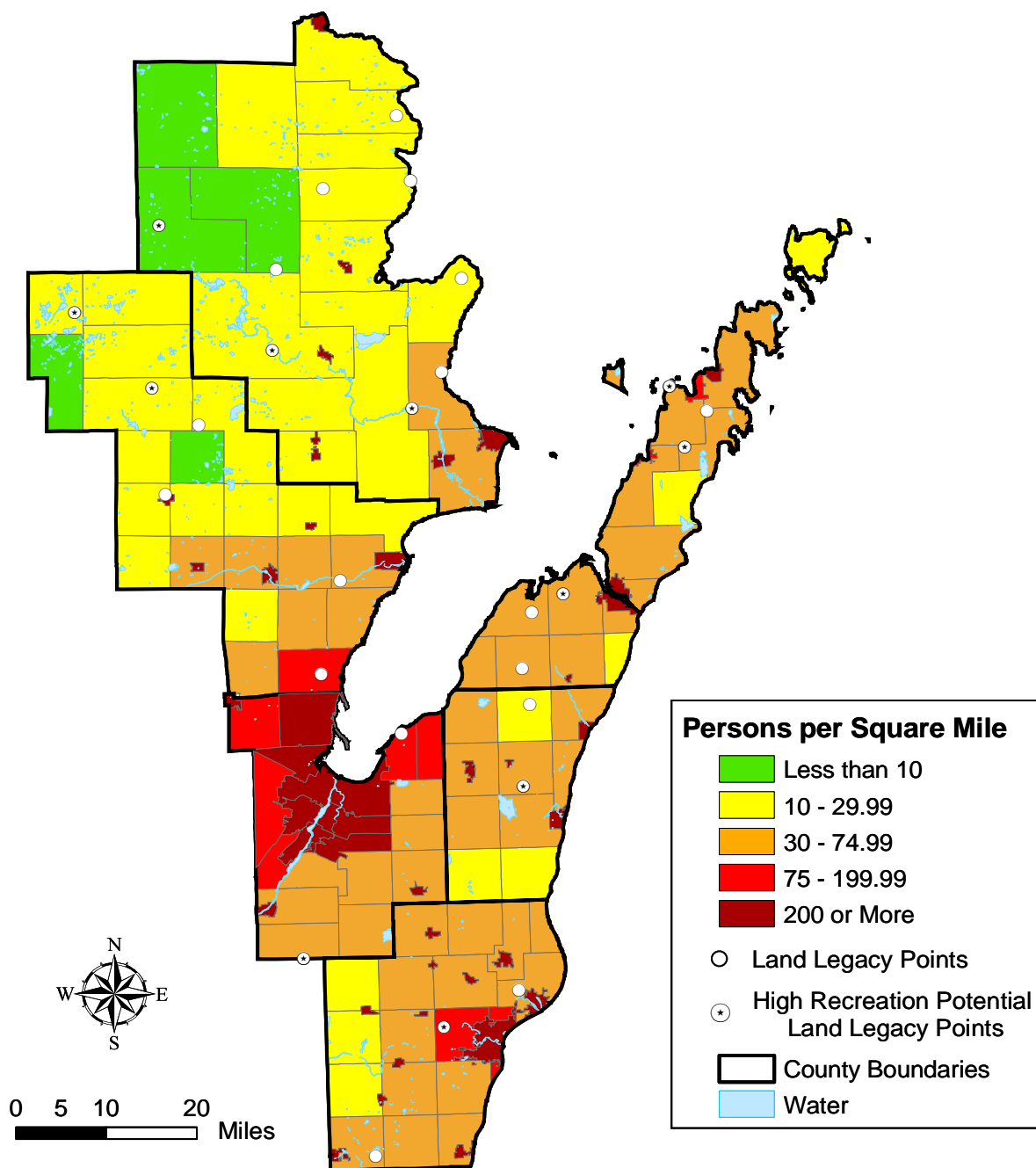




Figure 2

Population Density, 2004

Calculated at Municipal Level



Source: TIGER 2000, Census 2000



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





URBAN/RURAL

Few people in the Upper Lake Michigan Coastal Region live in rural areas. According to Census 2000 definitions, almost 64% of people live in urban areas. This includes people who live in densely settled territory with a population of 2,500 or more.

Table 1 shows the proportion of people living in urban places by county for the Upper Lake Michigan Coastal Region. In Brown County almost 84% of the population lives in an urban area.

Table 1
Urbanization in the Upper Lake Michigan Coastal Region, 2000

	Total Population	Urban Population	Percent Urban
Brown County	226,778	190,202	83.9%
Door County	27,961	8,795	31.5%
Kewaunee County	20,187	3,559	17.6%
Manitowoc County	82,887	50,448	60.9%
Marinette County	43,384	17,425	40.2%
Oconto County	35,634	7,104	19.9%
Upper Lake MI Coastal Region	436,831	277,533	63.5%

Source: Census 2000, Summary File 1



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





HOUSING DISTRIBUTION

Housing development impacts both the supply and the demand for outdoor recreation. Housing affects the *supply* of outdoor recreation resources by taking up land that may previously have been considered to be recreational or have potential for recreation activities. Outdoor recreation (especially those activities that require a substantial amount of open space, like backpacking, ATV riding, or hunting) is largely considered incompatible with higher density housing development.

Housing development also impacts *demand* for outdoor recreation. At the most basic level, housing development in an area generally means more people in that area who are likely to participate in some form of recreation activity nearby. In this way, housing unit counts inform outdoor recreation planners similarly to population counts.

Examining housing is especially useful to recreation planners because population counts do not include seasonal residents. Seasonal residents are an important component of demand for outdoor recreation in Wisconsin, and looking at housing development (including both permanent and seasonal homes) can offer a more complete view of where demand for outdoor recreation occurs than looking at population distribution alone.

Figure 3 shows the 2000 distribution of housing density in the Upper Lake Michigan Coastal Region by Census Block Group. The map looks similar to the population map presented earlier, except that the influence of seasonal housing stands out around the lakes in Oconto and Marinette Counties and in parts of Door County.



Applied Population Lab and Wisconsin Department of Natural Resources

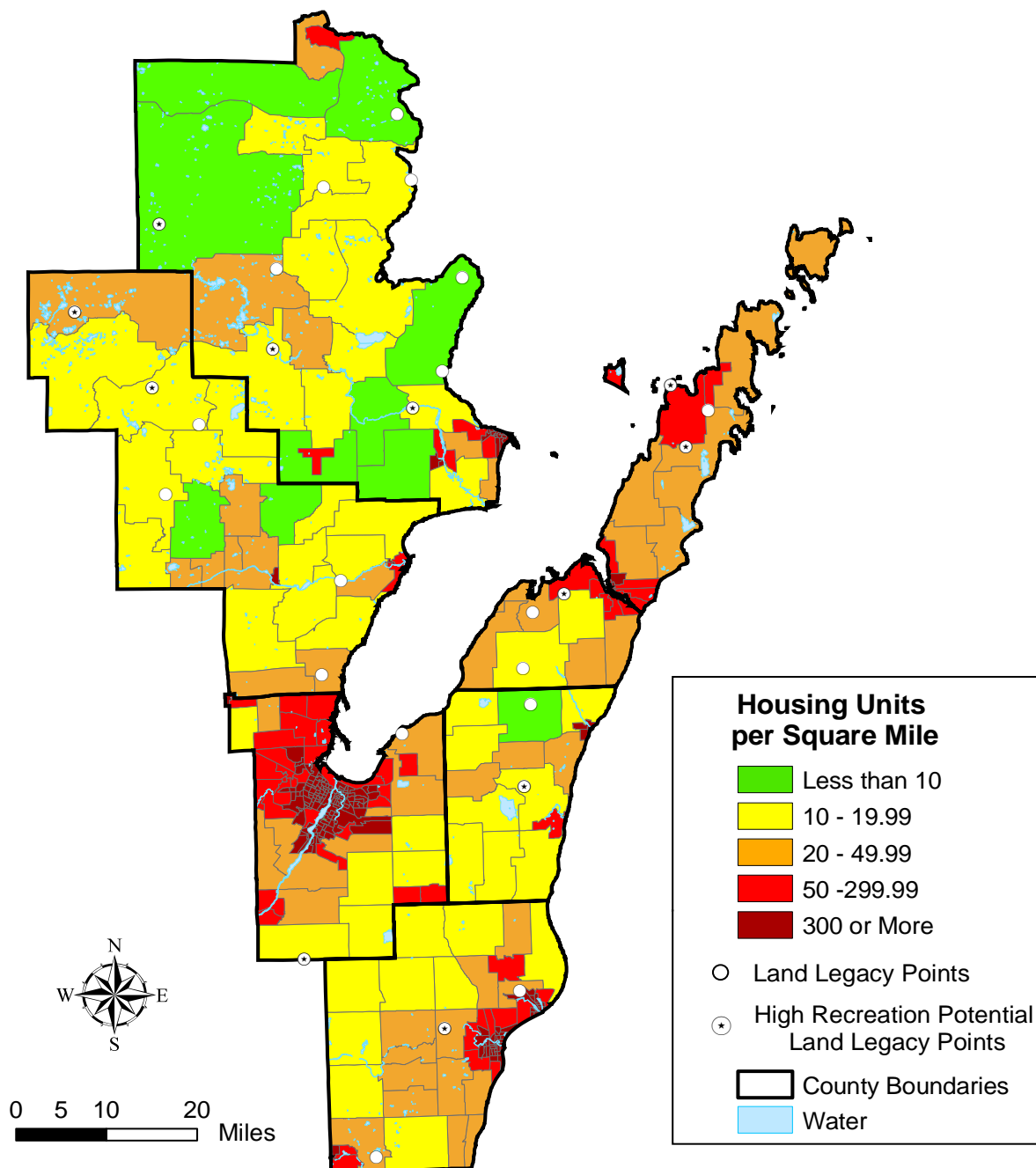
Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





Figure 3

Housing Density, 2000 Calculated at Block Group Level



Source: TIGER 2000, Census 2000



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





SEASONAL HOUSING AND TOURISM

Area residents constitute much of the demand for outdoor recreation, but a certain amount of demand also comes from non-residents, like seasonal home-owners and tourists. Table 2 shows the importance of seasonal housing and tourism in the Upper Lake Michigan Coastal Region. Seasonal housing is relatively prominent in this Region, with about 10% of all housing units being for seasonal or recreational use, compared to only 6.3% for the state as a whole. In Door County, more than 1 in every 3 housing units is seasonal. Marinette and Oconto Counties also have a substantial proportion of seasonal housing units.

Measuring the number of tourists who visit the Upper Lake Michigan Coastal Region is more difficult because good data is not readily available. Table 2 shows the percent of all workers age 16 and over who are employed in arts, entertainment, recreation, accommodation, and/or food services industries. We provide this employment measure with the idea that the more tourists who are visiting an area, the more people will be employed in tourism-related work. Tourism-related employment is particularly important in Door County.

Table 2
Seasonal Housing and Tourism in the Upper Lake Michigan Coastal Region, 2000

	Population	Housing Units	% Seasonal	% Employed in Tourism
Brown County	226,778	90,199	0.5%	7.3%
Door County	27,961	19,587	35.6%	13.8%
Kewaunee County	20,187	8,221	3.3%	5.4%
Manitowoc County	82,887	34,651	1.5%	6.3%
Marinette County	43,384	26,260	28.9%	8.4%
Oconto County	35,634	19,812	24.4%	7.3%
Upper Lake MI Coastal Region	436,831	198,730	10.4%	7.5%

Source: Census 2000, Summary File 1

Figures 4 and 5 show the distribution of seasonal housing and tourism at the Census Block Group level. These activities tend to be clustered around inland lakes in Marinette and Oconto Counties and throughout the Door County peninsula. In some areas the majority of all housing units are for seasonal use and at least 20% of all workers are employed in tourism-related industries.



Applied Population Lab and Wisconsin Department of Natural Resources

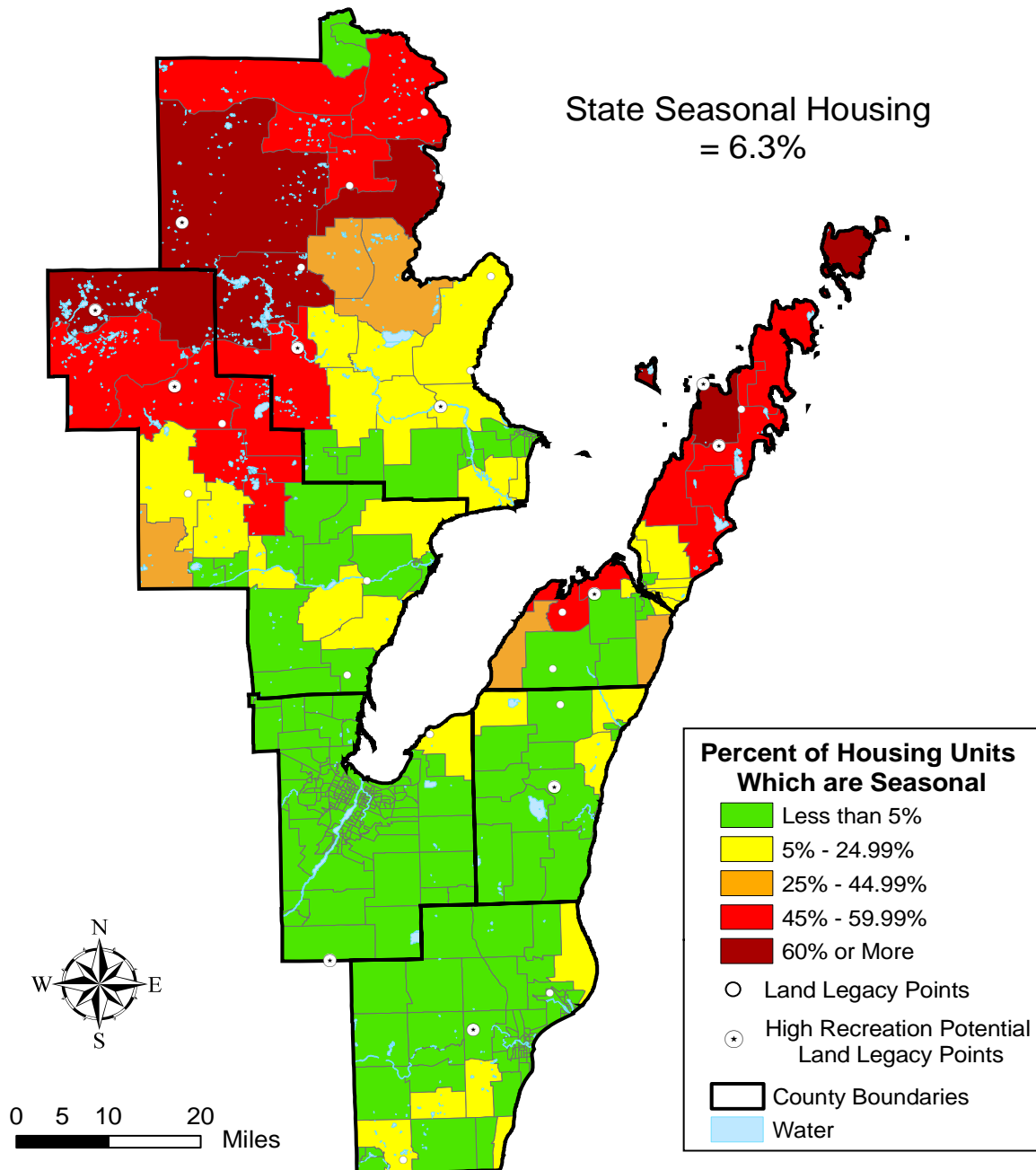
Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





Figure 4

Seasonal Housing Calculated at Block Group Level



Source: TIGER 2000, Census 2000



Applied Population Lab and Wisconsin Department of Natural Resources

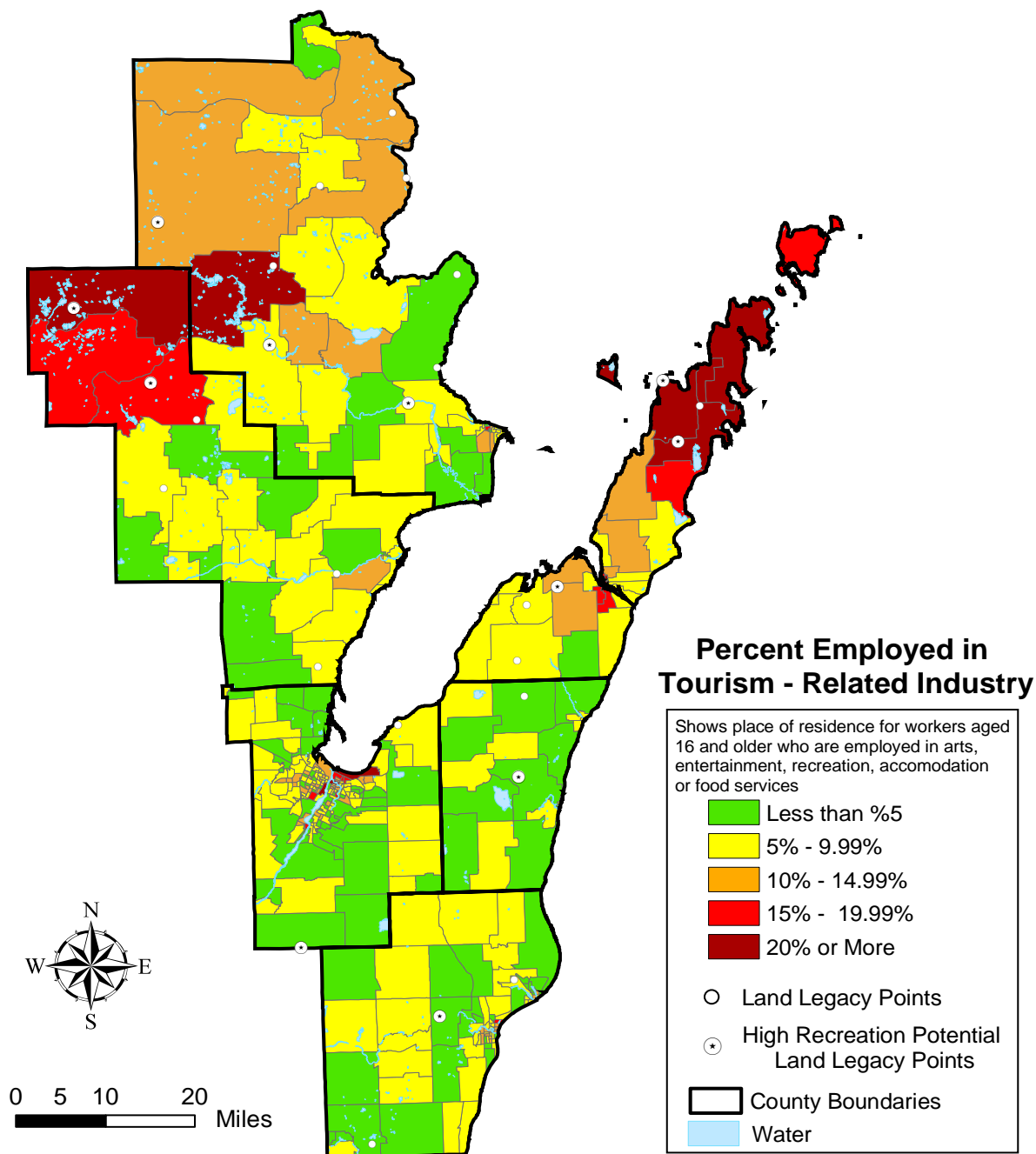
Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





Figure 5

Tourism Industry Employment Calculated at Block Group Level



Source: TIGER 2000, Census 2000



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





DEMOGRAPHIC CHARACTERISTICS

Social and economic characteristics of the population also influence participation in outdoor recreation. For instance, older people tend to participate in different recreational activities than young people; income may influence ability to participate in particular outdoor activities, like golfing; and education may have something to do with whether or not someone engages in nature study. These types of social and economic characteristics of the population vary across space. Near urban centers, people tend to make more money; near universities, people tend to be younger and more highly educated.

Table 3 provides a summary of social and economic characteristics by county. Figures 6-10 show how these characteristics vary across space.

Table 3
Demographic Characteristics in the Upper Lake MI Coastal Region

	Total Population	Median Age	Female	College Educated	Hispanic	American Indian	Asian	Median HH Income	Median Housing Value
Brown County	226,778	34.2	50.3%	22%	3.8%	2.3%	2.2%	\$46,447	\$116,100
Door County	27,961	42.9	50.7%	21%	1.0%	0.7%	0.3%	\$38,813	\$120,800
Kewaunee County	20,187	37.5	49.8%	11%	0.8%	0.3%	0.1%	\$43,824	\$92,100
Manitowoc County	82,887	38.3	50.5%	15%	1.6%	0.4%	2.0%	\$43,286	\$90,900
Marinette County	43,384	40.5	50.6%	13%	0.7%	0.5%	0.3%	\$35,256	\$69,800
Oconto County	35,634	38.8	49.7%	11%	0.7%	0.8%	0.2%	\$41,201	\$89,900
Upper Lake MI Coastal Region	436,831	36.7	50.3%	19%	2.5%	1.4%	1.6%	\$43,619	\$102,446

Source: Census 2000

Note: Regional "medians" represent the weighted average of constituent county medians;

Percent college educated calculated for persons age 25 and older; Housing value calculated for owner occupied housing units.

In comparison with other Regions, the population in the Upper Lake Michigan Coastal Region is slightly older. Median age for the state of Wisconsin as a whole is 36 years, compared to 36.7 years in the Upper Lake Michigan Coastal Region. The population in Door County is especially old, with a median age of almost 43 years. Marinette, Oconto, and Manitowoc Counties also have older populations, while Brown County is particularly young.

Sex and race are two more important demographic characteristics that might impact participation in outdoor recreation. In terms of sex ratios, the Upper Lake Michigan Coastal Region has moderately more females than males. This difference is probably due, at least in part, to the aging population and females' greater longevity. Racially, the Region is predominately white, but Hispanics, Asians, and American Indians make up a growing proportion of the population.



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





Existing Conditions

10

Income, housing values, and college education rates are low in the northern part of the Upper Lake Michigan Coastal Region. For the Region as a whole, college education rates and housing values are relatively low, while median income is approximately equal to the state median. Brown and Door Counties have as many college-educated people as the state median (about 22%). In Kewaunee and Oconto Counties, only 11% of adults have a four-year college degree. Housing values are lowest in Marinette County and especially high in Door County. Brown County has the highest median income in the Upper Lake Michigan Coastal Region, while the lowest median income is found in Marinette County.



Applied Population Lab and Wisconsin Department of Natural Resources

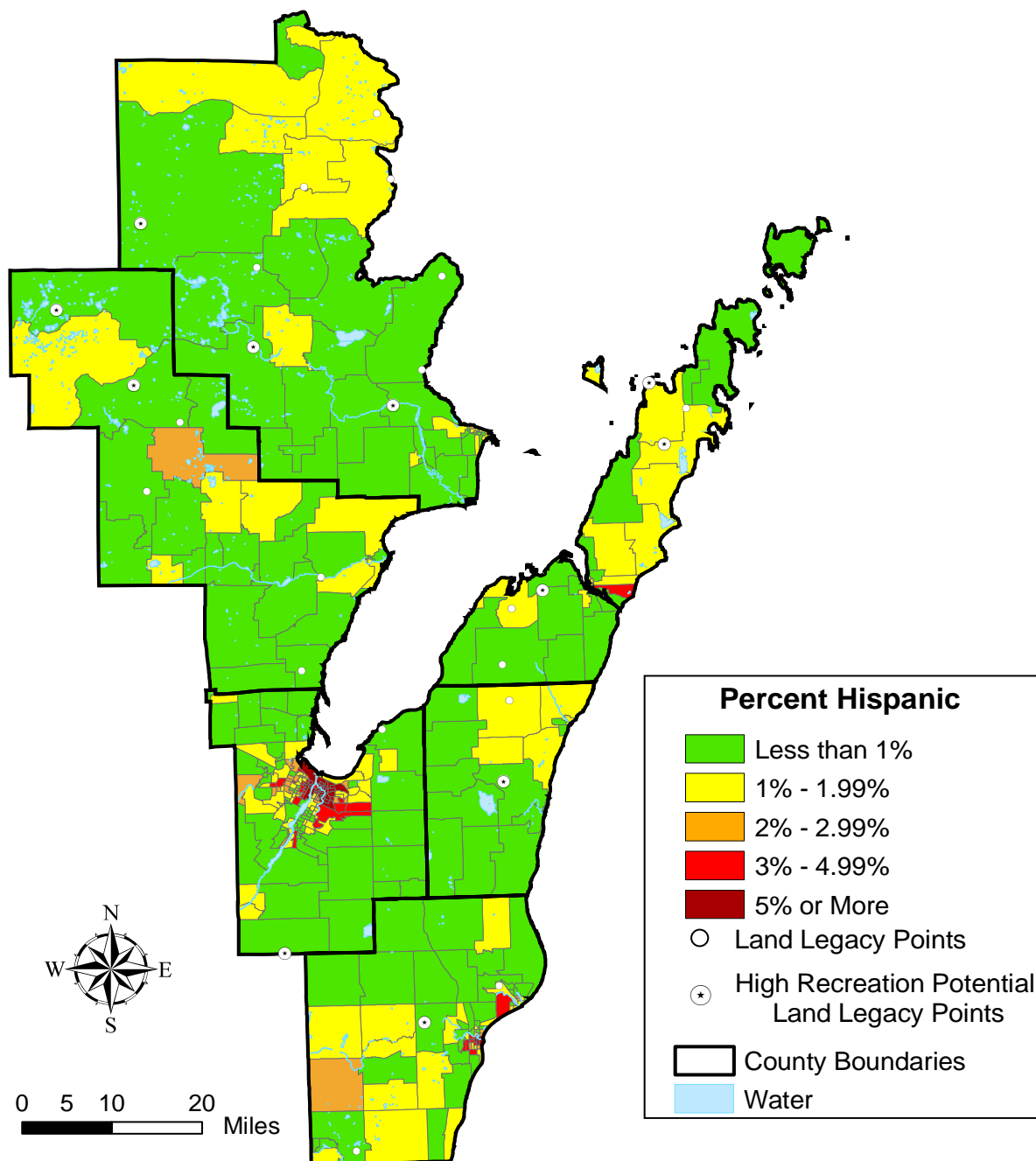
Contact: *Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us*





Figure 6

Hispanic Population Calculated at Block Group Level



Source: TIGER 2000, Census 2000



Applied Population Lab and Wisconsin Department of Natural Resources

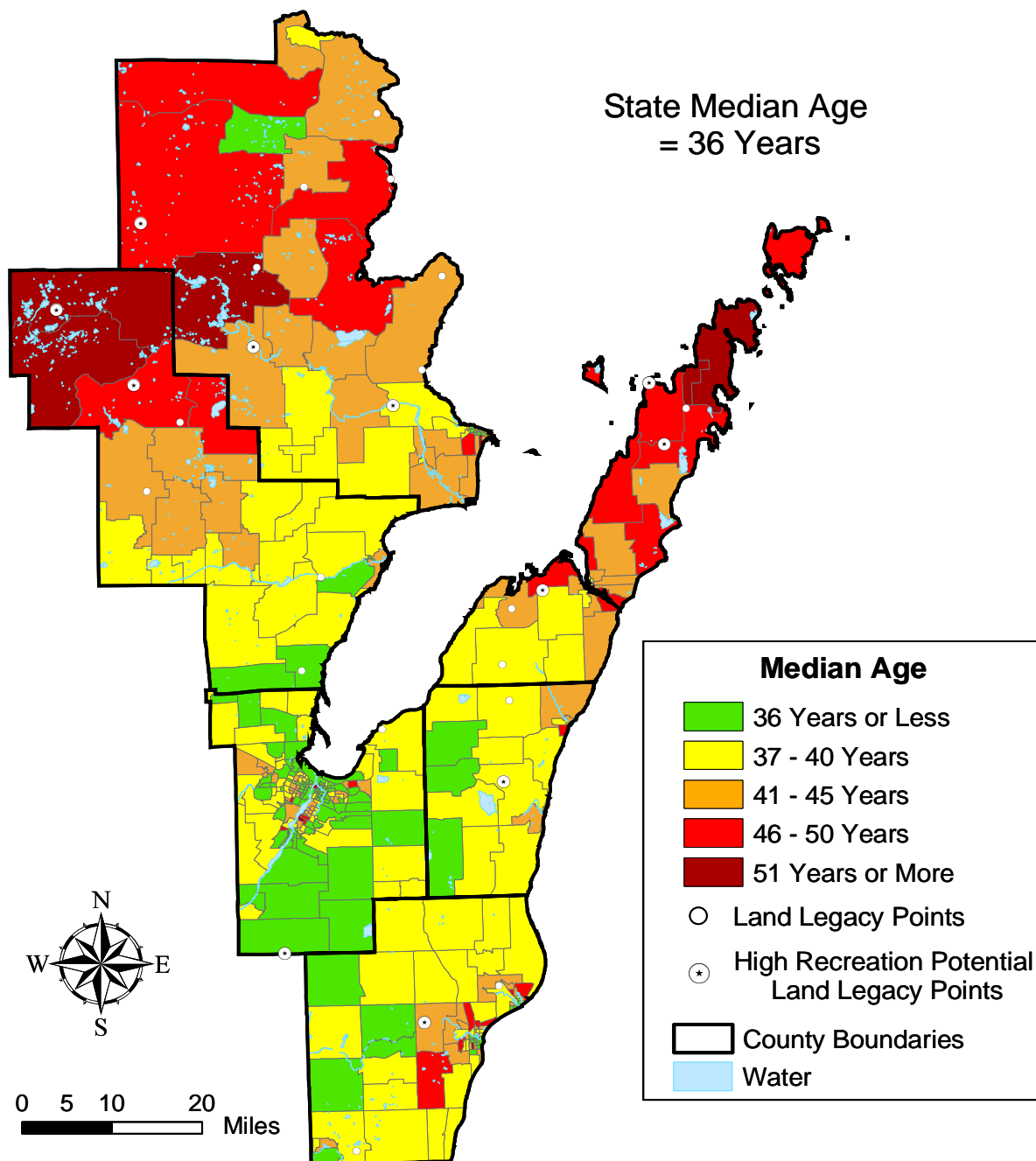
Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





Figure 7

Median Age Calculated at Block Group Level



Source: TIGER 2000, Census 2000



Applied Population Lab and Wisconsin Department of Natural Resources

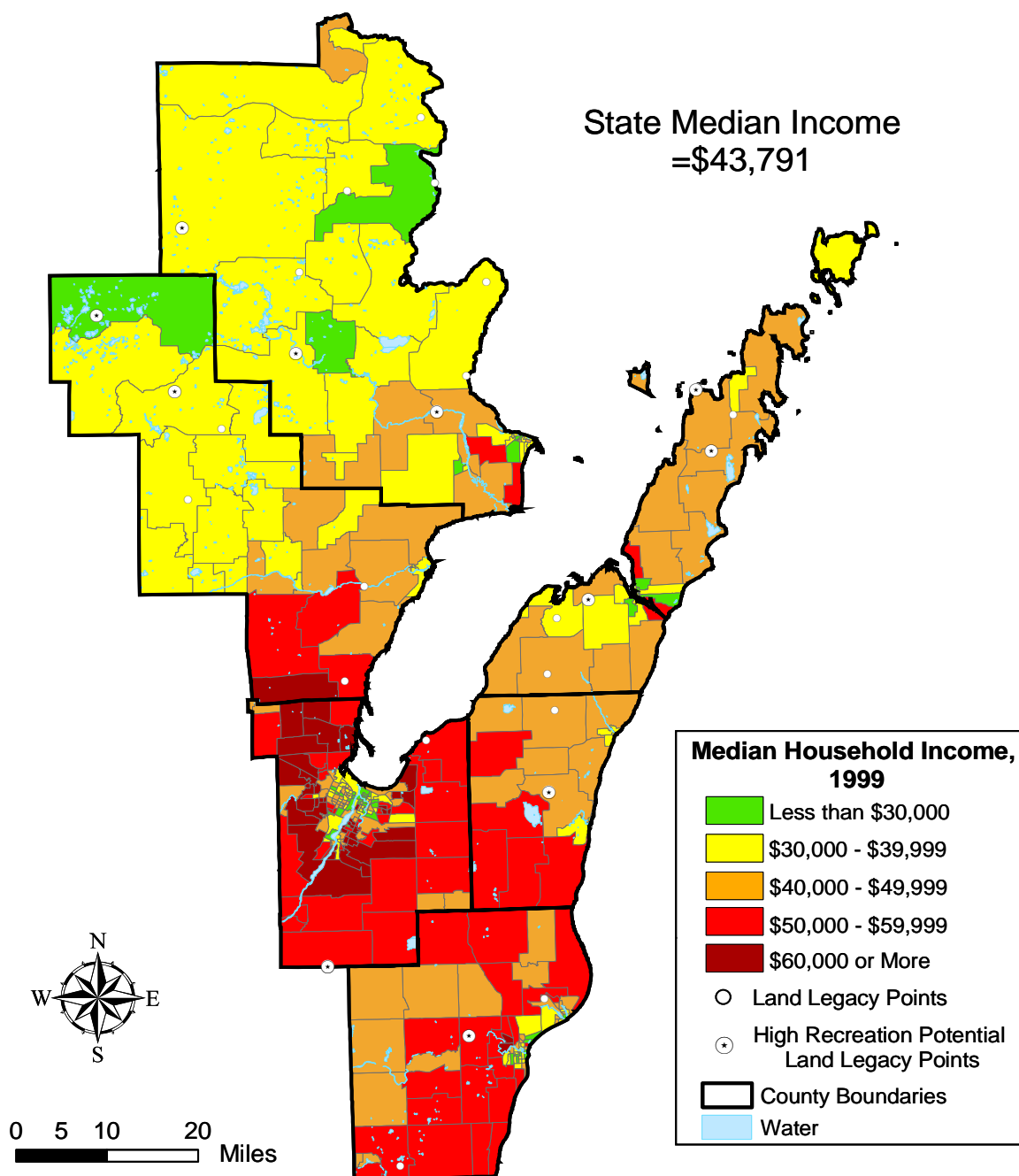
Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





Figure 8

Median Income Calculated at Block Group Level



Source: TIGER 2000, Census 2000



Applied Population Lab and Wisconsin Department of Natural Resources

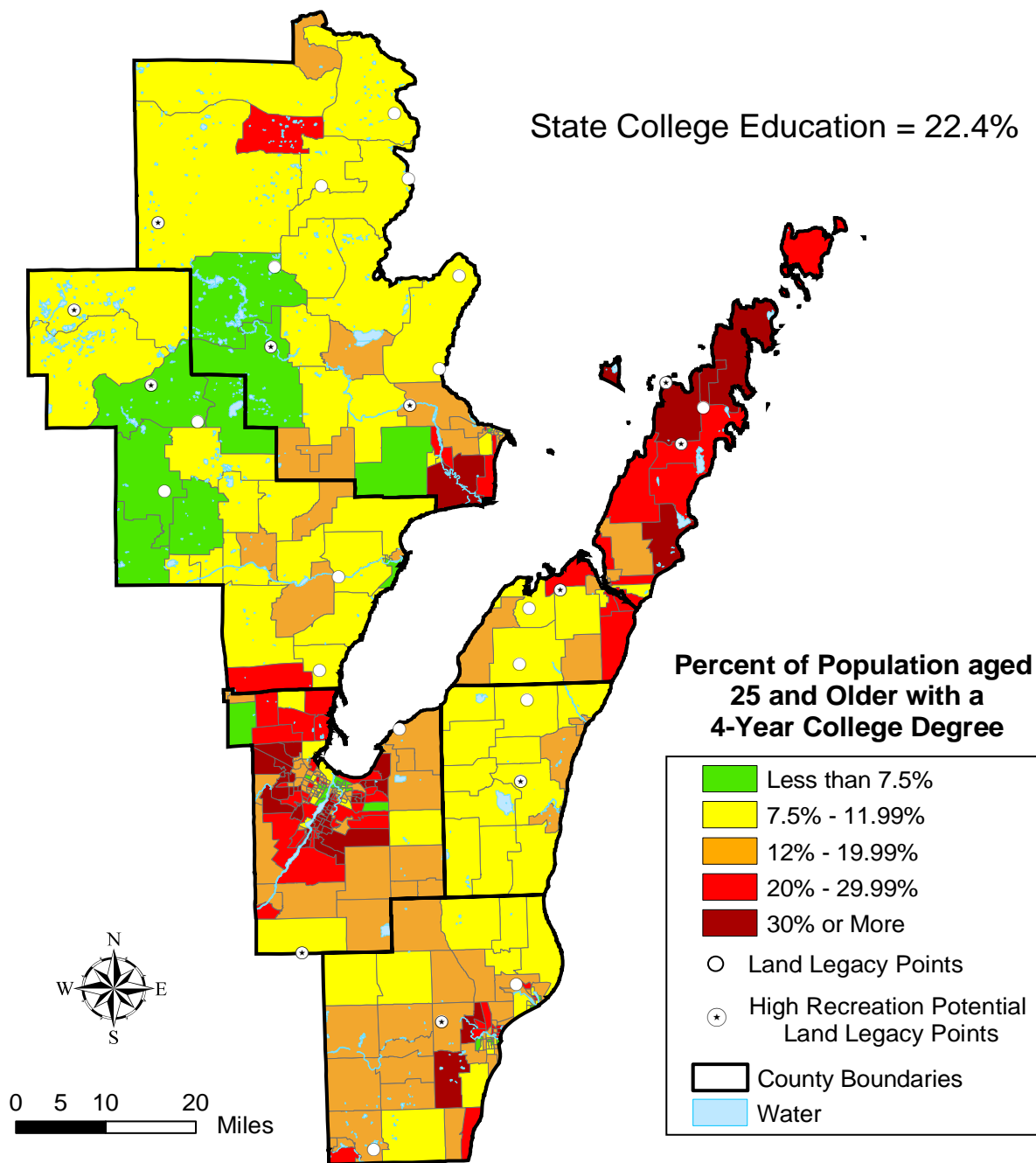
Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





Figure 9

College Education Calculated at Block Group Level



Source: TIGER 2000, Census 2000



Applied Population Lab and Wisconsin Department of Natural Resources

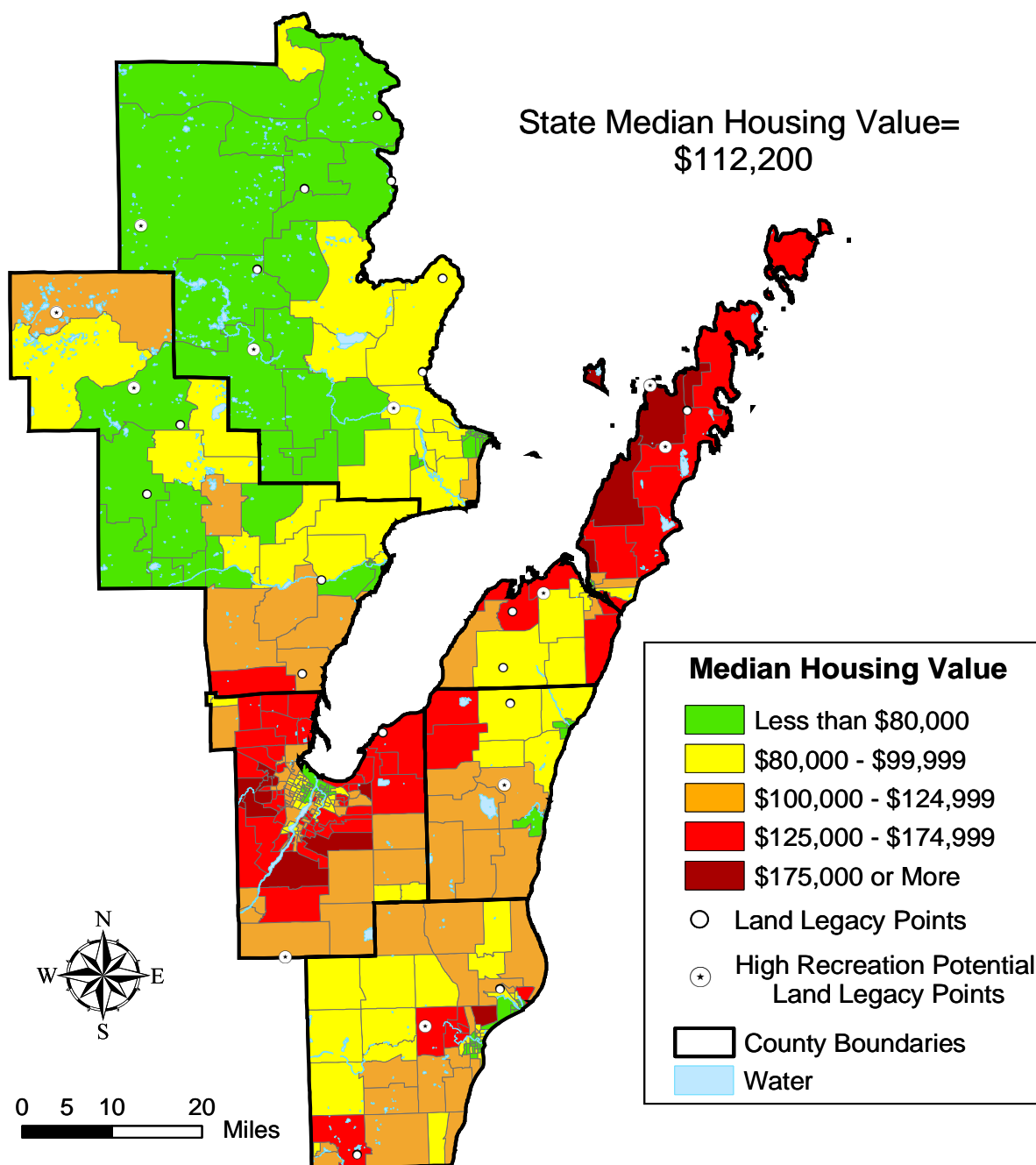
Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





Figure 10

Median Housing Value Calculated at Block Group Level



Source: TIGER 2000, Census 2000



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us

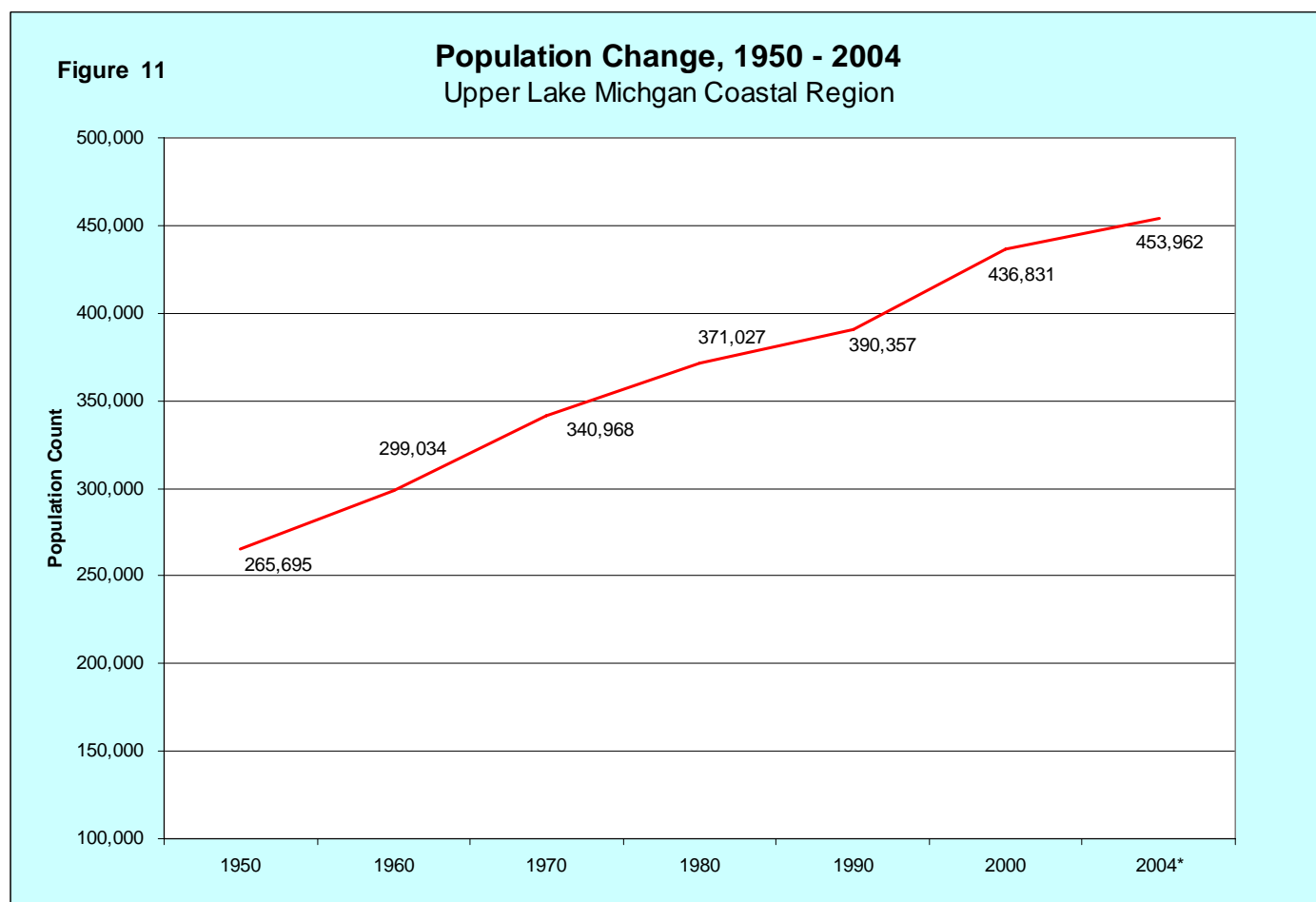




Looking at historical changes in population and housing may help to explain past and future trends in recreational participation. In this section, we examine demographic change in the Upper Lake Michigan Coastal Region. We consider the growth, urbanization, and shifting age structure of the population. In addition, we detail: where housing development has occurred, shifts in the prevalence of seasonal housing, and the impact that natural amenities (like coastline, lakes and forests) have had on population and housing growth.

POPULATION CHANGE

The Upper Lake Michigan Coastal Region has experienced steady population growth since at least 1950. Figure 11 shows regional population counts from 1950-2004. Between 1950 and 2004, the Upper Lake Michigan Coastal Region gained 188,267 people, an increase of about 71%. The rate of increase was fastest in the 1990s, growing by 12% between 1990 and 2000.



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





Population growth does not occur evenly across space, and while some parts of the Upper Lake Michigan Coastal Region have continually experienced rapid population growth, others areas have experienced less growth or even periods of decline. Table 4 shows population change over time by county.

Brown County has experienced the most growth over the last several decades. Door and Oconto Counties have also experienced substantial growth, especially in recent decades. Between 2000 and 2004, Oconto County added over 2,000 residents, for an increase of almost 6% in four years. Almost all of this growth occurred in the southern part of the county, near Green Bay, or in the northern lakes area.

Table 4a
Population Counts over Time in the Upper Lake Michigan Coastal Region

	Population Count						
	1950	1960	1970	1980	1990	2000	2004*
Brown County	98,314	125,082	158,244	175,280	194,594	226,778	237,841
Door County	20,870	20,685	20,106	25,029	25,690	27,961	29,114
Kewaunee County	17,366	18,282	18,961	19,539	18,878	20,187	20,860
Manitowoc County	67,159	75,215	82,294	82,918	80,421	82,887	84,264
Marinette County	35,748	34,660	35,810	39,314	40,548	43,384	44,204
Oconto County	26,238	25,110	25,553	28,947	30,226	35,634	37,679
Upper Lake MI Coastal Region	265,695	299,034	340,968	371,027	390,357	436,831	453,962

* Estimate from Wisconsin Dept. of Administration

Sources: Census 1950-2000, Wisconsin Dept. of Administration, 2004

Table 4b
Population Change over Time in the Upper Lake Michigan Coastal Region

	Population Change				Percent Change				Average Annual Percent Increase			
	1950-1970	1970-1990	1990-2000	2000-2004	1950-1970	1970-1990	1990-2000	2000-2004	1950-1970	1970-1990	1990-2000	2000-2004
Brown County	59,930	36,350	32,184	11,063	61.0%	23.0%	16.5%	4.9%	3.0%	1.1%	1.7%	1.2%
Door County	-764	5,584	2,271	1,153	-3.7%	27.8%	8.8%	4.1%	-0.2%	1.4%	0.9%	1.0%
Kewaunee County	1,595	-83	1,309	673	9.2%	-0.4%	6.9%	3.3%	0.5%	0.0%	0.7%	0.8%
Manitowoc County	15,135	-1,873	2,466	1,377	22.5%	-2.3%	3.1%	1.7%	1.1%	-0.1%	0.3%	0.4%
Marinette County	62	4,738	2,836	820	0.2%	13.2%	7.0%	1.9%	0.0%	0.7%	0.7%	0.5%
Oconto County	-685	4,673	5,408	2,045	-2.6%	18.3%	17.9%	5.7%	-0.1%	0.9%	1.8%	1.4%
Upper Lake MI Coastal Region	75,273	49,389	46,474	17,131	28.3%	14.5%	11.9%	3.9%	1.4%	0.7%	1.2%	1.0%

Sources: Census 1950-2000, Wisconsin DOA 2004

Figure 12 shows the average annual percent increase in population that municipalities experienced over four time periods. Data are fitted to 2003 municipal boundaries.



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us

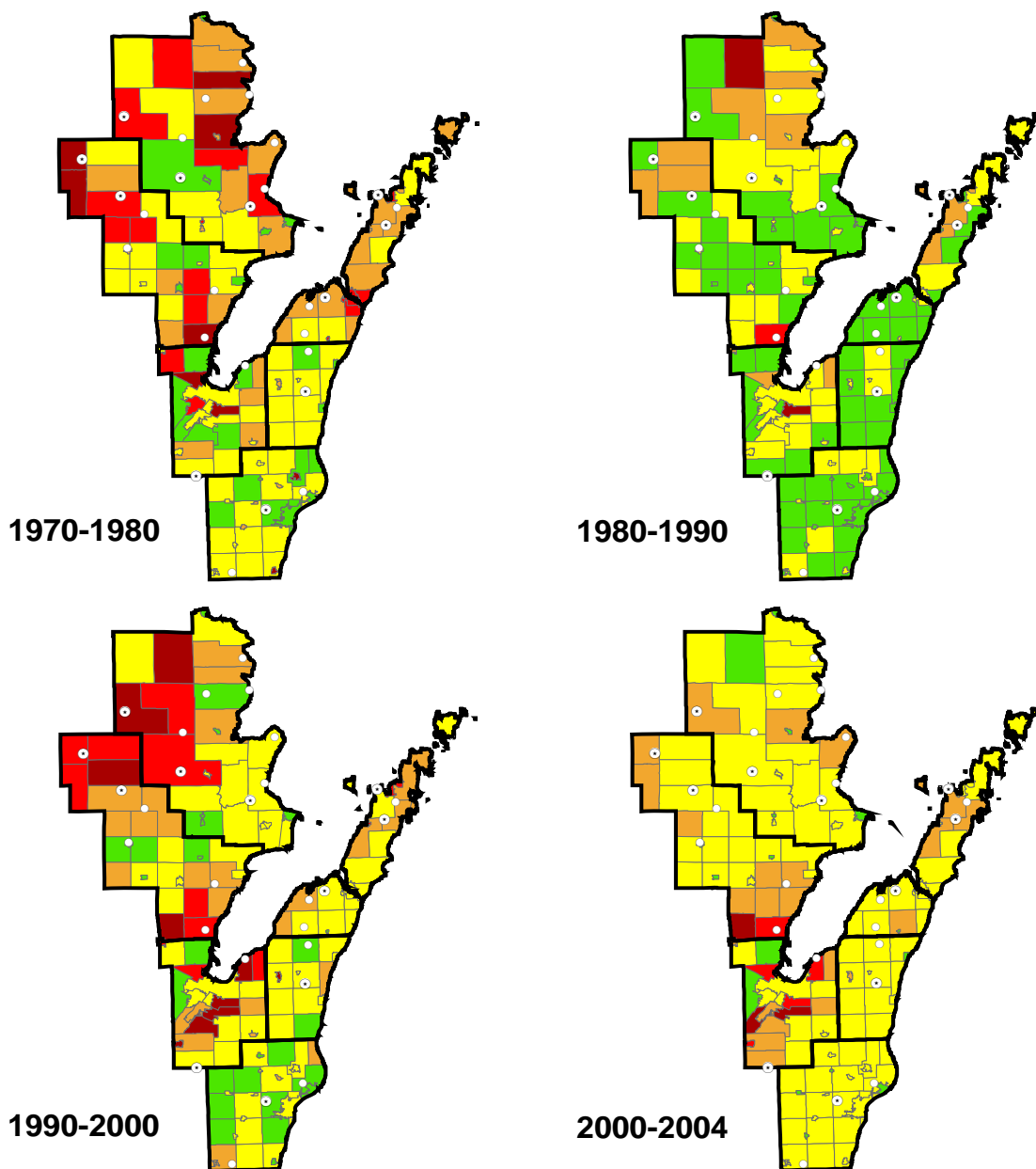




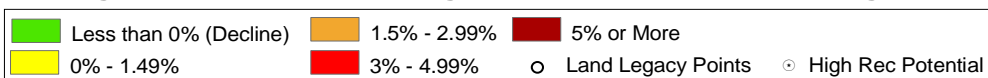
Figure 12

Population Change 1970-2004

Calculated at the Municipal Level



Average Annual Percent Change: Upper Lake MI Coastal Region



Source:
Wisconsin DOA, 2004
Population Estimates
Tiger 2003



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





AGE STRUCTURE

Demographers refer to the proportion of different aged people in the population as the population's age structure. Table 5 shows how median age has changed from 1950-2000 in the Upper Lake Michigan Coastal Region. In general, the population has gotten older over the last 50 years, with the median age increasing by seven years for the Region as a whole. This increase occurred between 1980 and 2000, as the Baby Boom generation began to reach older ages.

Table 5
Median Age in the Upper Lake Michigan Coastal Region, 1950-2000

	Median Age					
	1950	1960	1970	1980	1990	2000
Brown County	28.5	25.4	23.7	27.3	31.4	34.2
Door County	30.9	33.0	33.8	31.7	36.5	42.9
Kewaunee County	29.9	28.8	26.9	29.3	33.7	37.5
Manitowoc County	30.8	29.6	27.8	30.2	34.6	38.3
Marinette County	30.8	32.3	32.4	32.2	35.6	40.5
Oconto County	29.2	30.2	30.8	31.4	35.0	38.8
Upper Lake MI Coastal Region	29.7	28.4	26.9	29.2	33.2	36.7

Source: Census 1950-2000

Note: Regional medians are derived from the weighted median of the county median ages.

The aging of the population in the Upper Lake Michigan Coastal Region is affected, in part, by migration patterns. Migration processes affect both population counts and the age structure of the population. The balance of in- and out-migration for a local area is known as "net migration." Net in-migration means that migration is contributing to (depending on natural increase in the specific area) population growth, while net out-migration would contribute to population decline. Migration especially impacts the age structure of a local population when people of different age groups experience opposite migration trends. For instance, young people tend to move out of more rural areas of the state; and older people tend to retire in natural amenity-rich rural areas. This means that many rural areas in Wisconsin are experiencing an aging population due, in part, to migration. Such age patterns will impact demand for different types of outdoor recreation.



Applied Population Lab and Wisconsin Department of Natural Resources

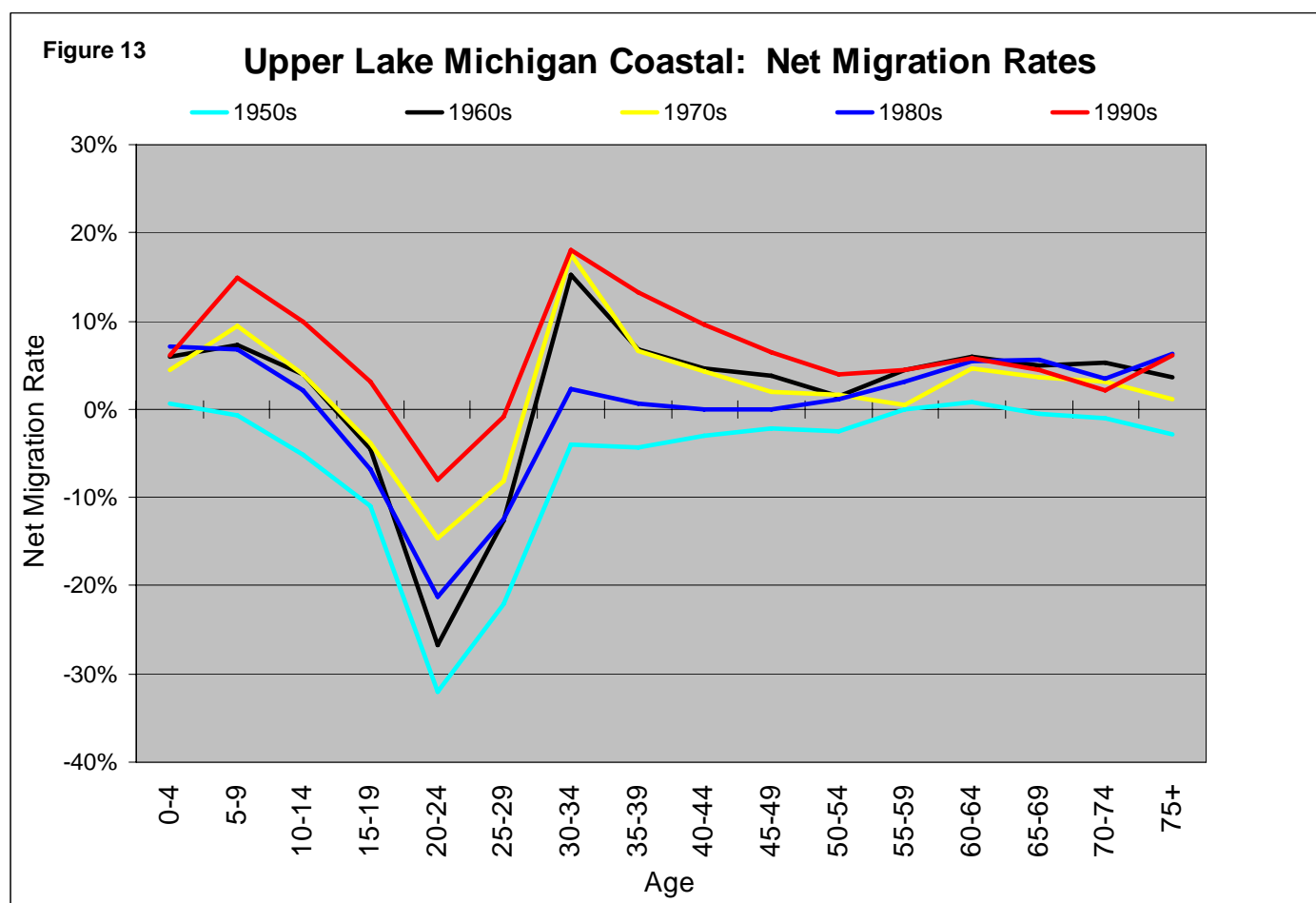
Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





NET MIGRATION BY AGE

Figure 13 summarizes age-specific net migration patterns for the Upper Lake Michigan Coastal Region from 1950-2000. For example, in the 1950's the Region experienced a net out-migration (below "0%" line) at almost every age group, especially of young adults. The 1950's net migration line tells us that the population aged 20-24 in 1960 was about 32% less than the population aged 10-14 in 1950. Between 1990 and 2000, the Upper Lake Michigan Coastal Region continued to experience a net loss of young adults, but saw a net increase in population at other age groups, especially of adults aged 30-40 and children. Such migration patterns will influence the number of families and young adults in the local population.



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





URBANIZATION

Over time the population of the U.S. and of Wisconsin has become increasingly urban. In 1900, about 38% of Wisconsin residents lived in urban areas. By 2000, this proportion had increased to 68%.

The urban population has increased more quickly than the rural population in the U.S. due to both natural increase and migration. In the past, rural residents tended to have more children than urban residents, but over the last several decades, this trend has switched and urban areas have higher birth rates than rural ones. In 2003, Wisconsin metropolitan counties had 13.3 births for every 1,000 residents, while non-metropolitan counties had only 11.3 (calculated from Wisconsin Dept. of Health and Family Services data). In addition, people have tended to move out of rural areas and off farms and into urban areas over the past several decades.

Table 6 shows the percent of the population living in urban areas 1950-2000. The urban population in the Upper Lake Michigan Coastal Region has increased from 53% in 1950 to 64% in 2000. Most of this urbanization occurred in Brown County where 84% of the 2000 population lived in urban areas.

Table 6
Urbanization in the Upper Lake Michigan Coastal Region, 1950-2000

	Percent Living in Urban Areas					
	1950	1960	1970	1980	1990	2000
Brown County	71.3%	77.7%	81.6%	81.4%	83.2%	83.9%
Door County	33.8%	35.5%	33.7%	35.3%	35.7%	31.5%
Kewaunee County	34.4%	36.2%	36.5%	33.0%	32.3%	17.6%
Manitowoc County	56.3%	62.4%	60.2%	58.6%	59.8%	60.9%
Marinette County	39.7%	45.7%	43.4%	37.6%	37.0%	40.2%
Oconto County	19.3%	19.1%	28.1%	24.2%	23.4%	19.9%
Upper Lake MI Coastal Region	52.8%	59.8%	63.1%	61.6%	63.4%	63.5%

Source: Census 1950-2000

Note: Some of the differences shown here, may be the result of changes in the way "urban" is defined by the U.S. Census Bureau.



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





MINORITY GROUPS

In the Upper Lake Michigan Coastal Region, 93% of the population identified as Non-Hispanic and White on the 2000 Census. Hispanics made up the largest minority group in this Region, representing almost 3% of the total population. Asians made up 1.6% of the 2000 population.

Table 7 shows the Hispanic and Asian populations 1960-2000. The number of Hispanics in the Upper Lake Michigan Coastal Region increased rapidly in the 1990s from 2,577 residents to 11,026 residents in 2000, for an overall increase of 328%. The number of Asian people in the Region increased from 3,762 residents in 1990 to 6,994 in 2000, for an increase of 86%.

Table 7
Changing Race and Ethnicity, 1950-2000

	Number of Hispanic Persons					Percent Change
	1960	1970	1980	1990	2000	1990-2000
Brown County	N/A	2,047	906	1,525	8,698	470.4%
Door County	N/A	0	130	153	267	74.5%
Kewaunee County	N/A	182	54	54	153	183.3%
Manitowoc County	N/A	537	522	582	1,343	130.8%
Marinette County	N/A	239	76	156	325	108.3%
Oconto County	N/A	743	94	107	240	124.3%
Upper Lake MI Coastal Region	N/A	3,748	1,782	2,577	11,026	328%

	Number of Asian Persons					Percent Change
	1960	1970	1980	1990	2000	1990-2000
Brown County	29	N/A	N/A	2,522	4,999	98.2%
Door County	3	N/A	N/A	47	84	78.7%
Kewaunee County	0	N/A	N/A	23	28	21.7%
Manitowoc County	14	N/A	N/A	1,071	1,678	56.7%
Marinette County	11	N/A	N/A	63	128	103.2%
Oconto County	4	N/A	N/A	36	77	113.9%
Upper Lake MI Coastal Region	61	N/A	N/A	3,762	6,994	86%

Source: Census 1950-2000

Note: Methods of data collection and reporting on race and ethnicity in the Census have changed over the years.

Consequently, data for some years are not available or have been estimated, and some of the changes seen above may be artificial.

Definitions were relatively stable between 1990 and 2000.

Note: Use of terminology and “labels” when talking about racial ethnic populations can be a sensitive issue. The authors of this report understand that there are some political, cultural and social preferences and implications in using particular terminology. We have chosen to use language that reflects Census-designated racial and ethnic categories in this report.



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us

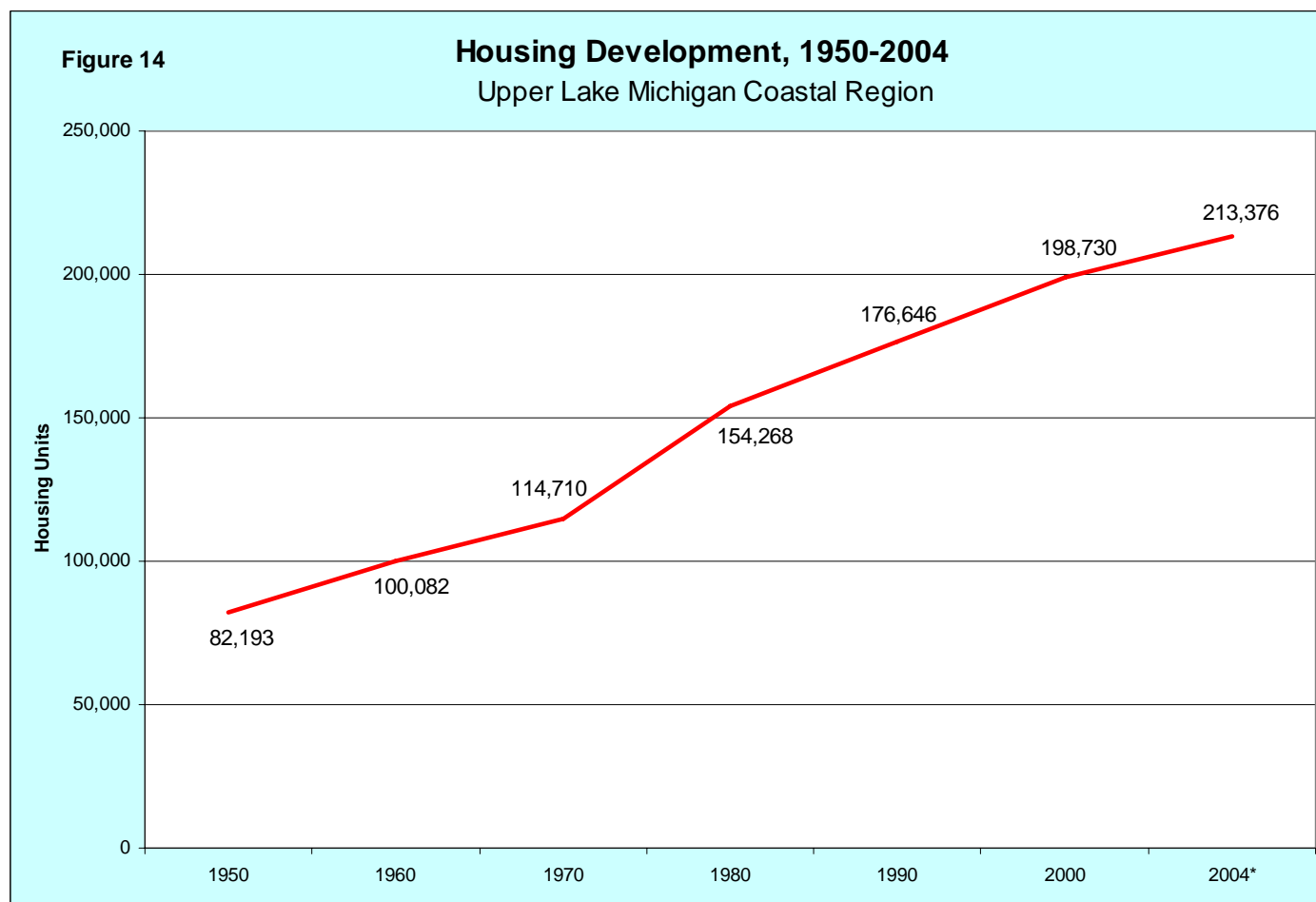




HOUSING DEVELOPMENT

Just as population in the Upper Lake Michigan Coastal Region has increased over time, so too has housing development. Figure 14 and Table 8 show the trajectory of housing growth for the Region and by county between 1950 and 2004. The number of housing units increased from 82,193 units in 1950 to 213,376 in 2004, for an overall increase of 160%. The fastest rate of growth occurred in the 1970's, when housing units increased by 34%.

Brown County has consistently experienced rapid housing development since 1950. Door, Marinette, and Oconto Counties have also experienced a relatively quick pace of housing growth, especially in particular time periods. Between 1970 and 1990, the number of housing units in Door County increased by 67%. Between 2000 and 2004, Oconto County experienced the fastest rate of housing development, increasing by 9% in four years.



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





Table 8a
Housing Development over Time in the Upper Lake Michigan Coastal Region

	Number of Housing Units						
	1950	1960	1970	1980	1990	2000	2004*
Brown County	27,461	35,524	45,198	62,282	74,740	90,199	98,076
Door County	9,015	12,147	10,779	15,324	18,037	19,587	21,123
Kewaunee County	5,008	5,512	5,888	7,023	7,544	8,221	8,770
Manitowoc County	19,695	22,736	25,411	30,140	31,843	34,651	36,141
Marinette County	12,006	13,595	15,487	22,559	25,650	26,260	27,666
Oconto County	9,008	10,568	11,947	16,940	18,832	19,812	21,600
Upper Lake MI Coastal Region	82,193	100,082	114,710	154,268	176,646	198,730	213,376

* Estimate from Wisconsin Dept. of Administration

Sources: Census 1950-2000, Wisconsin Dept. of Administration, 2004

Table 8b
Housing Development over Time in the Upper Lake Michigan Coastal Region

	Housing Unit Change				Percent Change				Average Annual Percent Increase			
	1950-1970	1970-1990	1990-2000	2000-2004	1950-1970	1970-1990	1990-2000	2000-2004	1950-1970	1970-1990	1990-2000	2000-2004
Brown County	17,737	29,542	15,459	7,877	64.6%	65.4%	20.7%	8.7%	3.2%	3.3%	2.1%	2.2%
Door County	1,764	7,258	1,550	1,536	19.6%	67.3%	8.6%	7.8%	1.0%	3.4%	0.9%	2.0%
Kewaunee County	880	1,656	677	549	17.6%	28.1%	9.0%	6.7%	0.9%	1.4%	0.9%	1.7%
Manitowoc County	5,716	6,432	2,808	1,490	29.0%	25.3%	8.8%	4.3%	1.5%	1.3%	0.9%	1.1%
Marinette County	3,481	10,163	610	1,406	29.0%	65.6%	2.4%	5.4%	1.4%	3.3%	0.2%	1.3%
Oconto County	2,939	6,885	980	1,788	32.6%	57.6%	5.2%	9.0%	1.6%	2.9%	0.5%	2.3%
Upper Lake MI Coastal Region	32,517	61,936	22,084	14,646	39.6%	54.0%	12.5%	7.4%	2.0%	2.7%	1.3%	1.8%

Figure 15 shows housing density between 1950 and 2000 at the Census Block Group level. The maps show the approximate number of housing units per square mile in each decade. The landscape has gradually filled up with increasing numbers of homes, especially on the Door County peninsula and in the outlying areas around Green Bay.



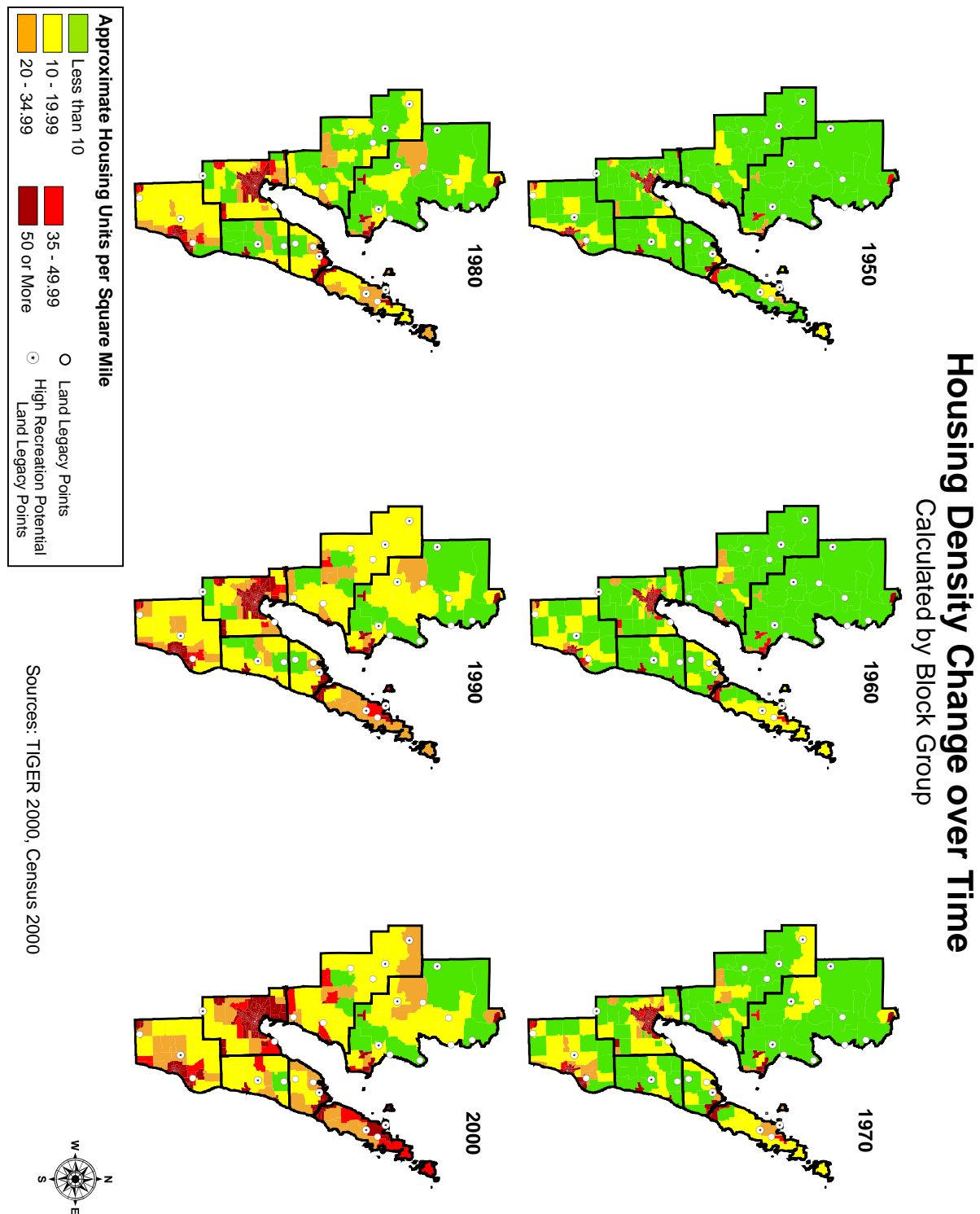
Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





Figure 15



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us

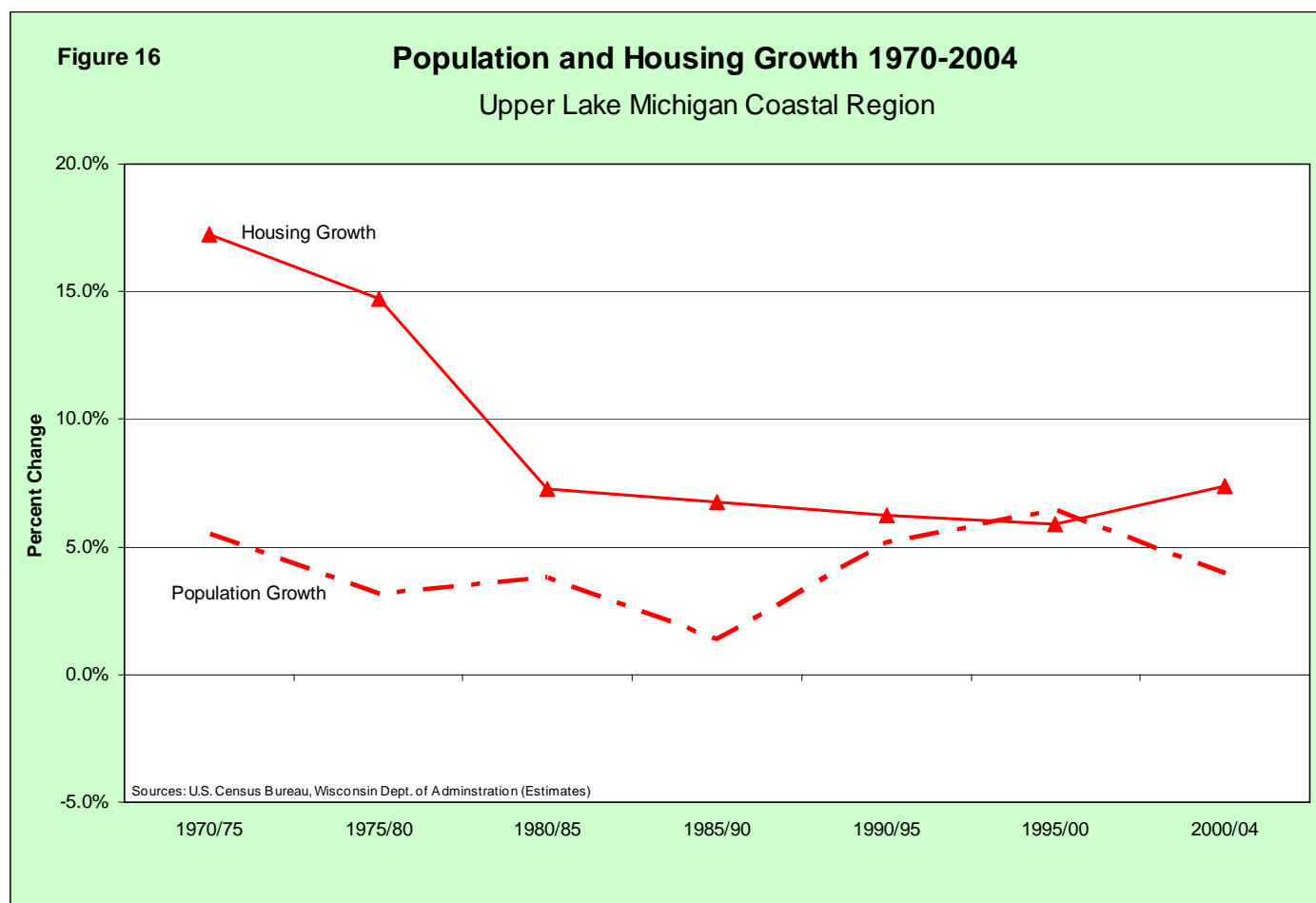




Assuming that more people need more houses, we would expect housing growth to occur in relation to population growth. In reality, housing development depends on factors other than population growth such as: seasonal housing, interest rates, decisions of policy makers and residential developers, and the number of people per household. For this reason, we sometimes see housing growth that outpaces population growth, and vice versa.

Figure 16 shows how housing development has occurred with relation to population growth over the last few decades in the Upper Lake Michigan Coastal Region. The chart shows the percent change in each time period, with 0% meaning that the number of housing units and/or population in the Region did not change at all, negative percentages depict a decline, and positive percentages show percent of increase.

In the 1970's housing growth occurred at a rapid rate. In 1975 the number of housing units in the Region was about 17% higher than the number of housing units in 1970, while the number of people in 1975 was about 6% higher than the number of people in 1970. Housing development has consistently outpaced population growth in the Upper Lake Michigan Coastal Region (except for in the late 1990's).



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





SEASONAL HOUSING

Over that last 50 years, seasonal housing has been an important factor when thinking about outdoor recreation in the Upper Lake Michigan Coastal Region. Table 9 shows the number and the percent of all housing units that were for seasonal use 1950-2000.

The number of seasonal homes more than doubled between 1950 and 1990, from 8,995 homes to 22,817 (an increase of 154%). Then, between 1990 and 2000, the number of seasonal homes dropped, due to conversion into full-time residencies. During the 1990's many people chose to retire and live full-time in homes that were previously only for seasonal use. Despite this recent drop, seasonal housing remains an important factor to consider for outdoor recreation in the Upper Lake Michigan Coastal Region, with 10% of all housing units being for seasonal use. In 2000, most seasonal housing units in the Region were located in Marinette, Door, or Oconto County.

Table 9
Seasonal Housing in the Upper Lake Michigan Coastal Region, 1950-2000

	Number of Seasonal Housing Units						Percent Seasonal		
	1950	1960	1970	1980	1990	2000	1960	1980	2000
Brown County	2,712	676	490	407	346	414	2%	0.7%	0.5%
Door County	98	5,277	2,411	5,366	6,392	6,970	43%	35.0%	35.6%
Kewaunee County	327	213	167	218	324	270	4%	3.1%	3.3%
Manitowoc County	1,304	464	442	664	557	518	2%	2.2%	1.5%
Marinette County	1,588	2,739	3,700	7,442	8,532	7,586	20%	33.0%	28.9%
Oconto County	2,966	3,061	2,131	6,272	6,666	4,837	29%	37.0%	24.4%
Upper Lake MI Coastal Region	8,995	12,430	9,340	20,369	22,817	20,595	12%	13.2%	10.4%

Source: Census 1950-2000

Note: Data collection and reporting on seasonal housing have changed over the years. Consequently, data for some years have been estimated.

Note: Because of changing Census definitions and compilation methods over time, the data shown here are not perfectly comparable between decades, and they do not represent exact true counts. Rather, these data are estimates of the actual proportions of seasonal housing units, and they offer a general understanding of how seasonal housing has fluctuated over the time period.



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





NATURAL AMENITIES, RECREATION AND POPULATION CHANGE

Researchers (i.e. David McGranahan, Calvin Beale, and Ken Johnson) have found evidence that natural amenities (like climate, topography, forests, lakes, and rivers) and recreational resources are associated with population growth in some rural areas. The idea is that many people are attracted to natural amenities and want to live in or near places that offer natural beauty and recreational opportunities. According to this line of thought, we might expect areas rich in natural amenities to experience disproportionately high population and housing growth. This is important to consider because population and housing growth in these amenity-rich areas will impact the supply and demand for outdoor recreation, as well as the integrity of the natural environment.

We can get an idea of what the capacity for such amenity-based growth might be the Upper Lake Michigan Coastal Region by looking at land cover. Table 10 shows land cover types in the Upper Lake Michigan Coastal Region, as they existed in 1992. The Region has much agriculture, especially in Brown, Kewaunee, and Manitowoc Counties. Marinette, Door, and Oconto Counties are heavily forested and have much wetland area.

Table 10
Land Cover in the Upper Lake Michigan Coastal Region

	Urban	Agricultural	Grassland	Forest	Water	Wetland	Barren	Shrubland
Brown County	7.2%	71.8%	3.7%	7.4%	1.0%	7.3%	1.5%	0.0%
Door County	1.1%	42.8%	12.1%	24.8%	1.1%	16.3%	1.9%	0.0%
Kewaunee County	0.7%	75.8%	3.6%	6.6%	0.1%	12.4%	0.7%	0.0%
Manitowac County	2.2%	73.1%	3.3%	6.5%	0.3%	13.3%	1.2%	0.0%
Marinette County	0.4%	12.0%	7.1%	53.1%	2.2%	22.9%	0.6%	1.7%
Oconto County	0.3%	33.8%	3.6%	38.9%	1.8%	21.2%	0.2%	0.2%
Upper Lake MI Coastal Region	1.5%	40.9%	5.6%	31.2%	1.4%	17.8%	0.9%	0.6%
Wisconsin State	1.6%	30.8%	10.7%	37.5%	3.4%	14.1%	1.1%	0.9%

Source: Wisconsin DNR Wisland, 1998

Note: Because the Upper Lake Michigan Coastal Region borders Lake Michigan, the coast serves as a natural amenity feature that is not captured in this table. Every county in the Region enjoys some coastline.



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





In their research, Beale and Johnson have identified non-metropolitan counties that have a great deal of tourism, recreation and entertainment, and seasonal housing. They call these counties “Nonmetro Recreation Counties,” and they find that across the United States, Recreation Counties have experienced especially high net migration rates, and higher population growth rates than either metropolitan counties or other non-metropolitan counties (Johnson and Beale, 2002).

In the Upper Lake Michigan Coastal Region, Door, Marinette, and Oconto Counties are classified as “Nonmetro Recreation Counties.” These counties (along with Brown County) have consistently experienced faster population growth than other counties in the Region. They also are the counties with the most forest (Marinette County- 53%) and the most wetlands (Marinette- 23%, Oconto- 21%). Table 11 compares population and housing change over time in Recreation Counties to other counties in the Upper Lake Michigan Coastal Region.

Table 11
Natural Amenities, Recreation, and Population Change: Upper Lake Michigan Coastal Region

	Land Cover		Population Change			Housing Change		
	% Forest	% Wetland	1970-1990	1990-2000	2000-2004	1970-1990	1990-2000	2000-2004
Recreation Counties								
Door County	24.8%	16.3%	27.8%	8.8%	4.1%	67.3%	8.6%	7.8%
Marinette County	53.1%	22.9%	13.2%	7.0%	1.9%	65.6%	2.4%	5.4%
Oconto County	38.9%	21.2%	18.3%	17.9%	5.7%	57.6%	5.2%	9.0%
Other Counties								
Brown County	7.4%	7.3%	23.0%	16.5%	4.9%	65.4%	20.7%	8.7%
Kewaunee County	9.1%	12.4%	-0.4%	6.9%	3.3%	28.1%	9.0%	6.7%
Manitowoc County	12.1%	13.3%	-2.3%	3.1%	1.7%	25.3%	8.8%	4.3%

Sources: Census 1950-2000; Wisconsin Dept. of Administration, 2004; Wisconsin DNR WiscLand, 1998

It is important to note that several other factors (in addition to natural amenities and recreational opportunity) impact population and housing growth. For instance, distance from major cities and transportation routes also play large roles in determining population and housing growth rates. These factors likely account for the high growth in Brown County (home of Green Bay) and the relatively fast pace of housing development in non-recreational counties between 1990 and 2000.



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





The Wisconsin DOA provides population projections at the municipality and county levels. At the county level, they provide these projections by age, allowing us to estimate county median ages for coming years.

According to these projections, the population of the Upper Lake Michigan Coastal Region will continue to increase in size and in median age in coming years.

POPULATION PROJECTIONS

By 2010 the Region's population is projected to grow to 470,518 residents, an increase of 3.6% over the 2004 population (see Table 12). By 2020 the population of the Upper Lake Michigan Coastal Region is projected to reach 501,198. Oconto County is projected to have the highest rate of increase in the Region, and Brown County is also projected to experience substantial growth.

Table 12
Population Projections for the Upper Lake Michigan Coastal Region

	Estimate	Projection		Projected Increase		Average Annual % Increase	
	2004	2010	2020	2004-2010	2010-2020	2004-2010	2010-2020
Brown County	237,841	248,529	269,812	10,688	21,283	0.75%	0.86%
Door County	29,114	30,112	30,800	998	688	0.57%	0.23%
Kewaunee County	20,860	21,343	22,457	483	1,114	0.39%	0.52%
Manitowoc County	84,264	86,307	89,860	2,043	3,553	0.40%	0.41%
Marinette County	44,204	44,557	45,251	353	694	0.13%	0.16%
Oconto County	37,679	39,670	43,018	1,991	3,348	0.88%	0.84%
Upper Lake MI Coastal Region	453,962	470,518	501,198	16,556	30,680	0.61%	0.65%

Source: Wisconsin Dept. of Administration, 2004

Figure 17 shows the percent increase in population projected to occur at the municipality level 2000-2010 and 2010-2020. In general, rates of population growth are projected to be faster 2000-2010 than 2010-2020. High growth is projected to occur around Green Bay and in parts of Marinette, Oconto, and Door Counties.

South of Green Bay, high growth is projected in the Village of Bellevue and the Town of Ledgeview. Southwest, the Village of Wrightstown and the Town of Lawrence are projected to grow rapidly. In northern Brown and southern Oconto Counties, the Towns of Suamico, Little Suamico, and Chase are projected to experience high growth, as well as the Town of Scott to the east. Land Legacy points in these areas include the Suamico, Little Suamico, and Pensaukee Rivers area and the Red Banks Alvar area in the Town of Chase.

In the inland lakes area of Marinette and Oconto Counties, the Towns of Silver Cliff, Stephenson, and Townsend are projected to experience high growth in coming years. High recreation potential Land Legacy points in this area include the Peshtigo River and the Chequamegon-Nicolet National Forest. In Door County, the Towns of Gibraltar, Bailey's Harbor, Egg Harbor, and Liberty Grove are projected to experience high population growth. This projected growth may impact high recreation potential Land Legacy points such as Peninsula State Park to Jacksonport Corridor.



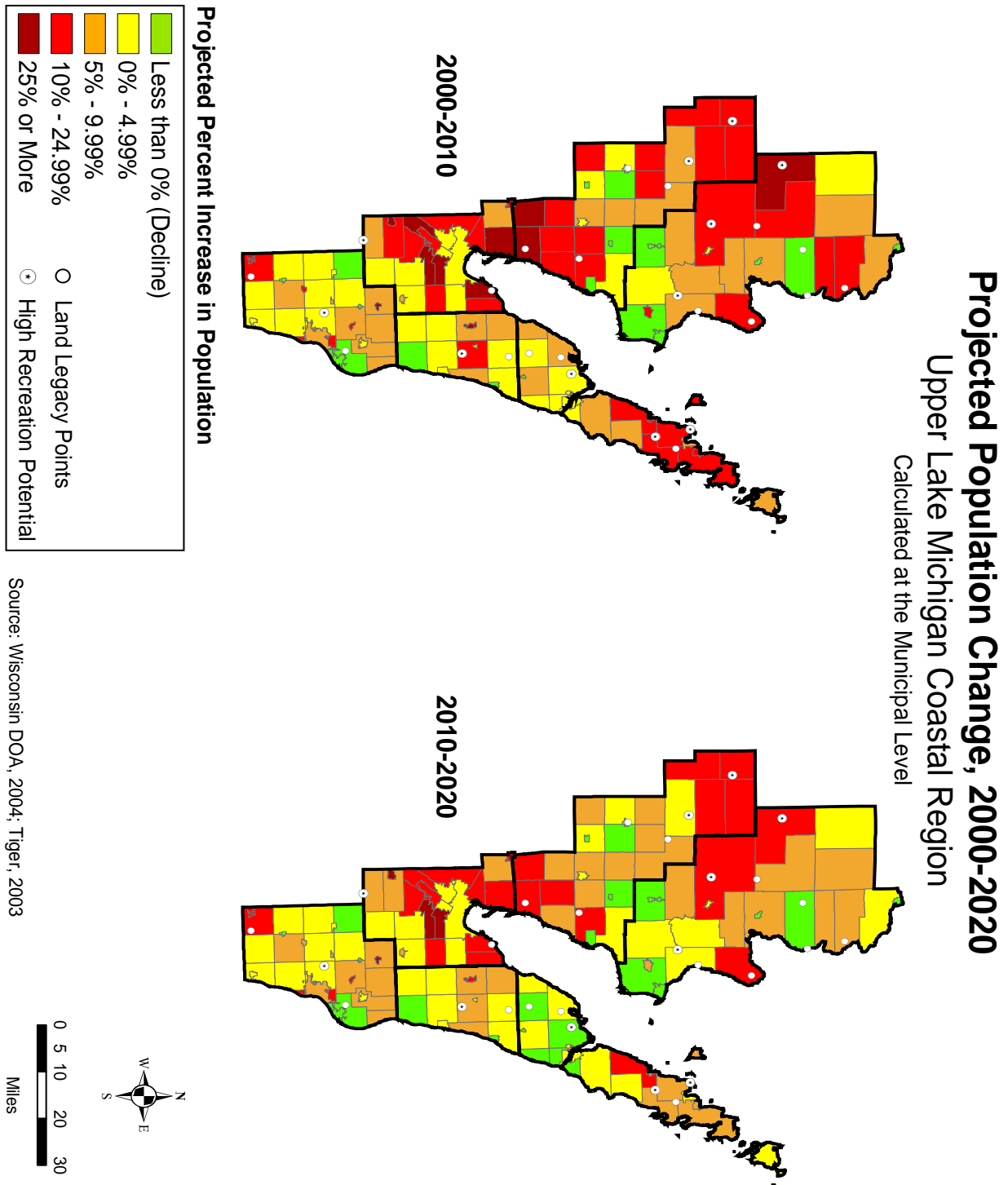
Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





Figure 17



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





AGE PROJECTIONS

As mentioned previously, the population in the Upper Lake Michigan Coastal Region is slightly older than the state of Wisconsin as a whole. Projections suggest that the aging trend will continue in the coming years. Table 13 shows observed and projected median age for counties in the Upper Lake Michigan Coastal Region 2000-2010. While population across the state of Wisconsin is also projected to grow older over the next few years, population in the Upper Lake Michigan Coastal Region is projected to age faster than the state average, and especially fast in Door and Marinette Counties.

By 2010, median age is projected to reach 39.5 years in the Upper Lake Michigan Coastal Region and 50 years in Door County.

Table 13
Median Age in the Upper Lake Michigan Coastal Region, 2000-2010

	Observed 2000	Projected		Change	
		2005	2010	2000-2005	2005-2010
Brown County	34	35	36	1	1
Door County	43	46	50	3	4
Kewaunee County	38	39	40	1	1
Manitowoc County	38	40	41	2	1
Marinette County	41	43	46	2	3
Oconto County	39	41	43	2	2
Upper Lake MI Coastal Region	36.6	38.1	39.5	1.5	1.4
Wisconsin State	36.0	37.0	38.0	1.0	1.0

Source: Wisconsin Dept. of Administration, 2004

Projected Median Age is estimated from the D.O.A. age-specific population projections, 2004



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us





CONCLUSIONS

The Upper Lake Michigan Coastal Region is heavily influenced by the Lake Michigan coast and by the City of Green Bay. Within the Region, most people live in Brown County and the suburbs of Green Bay. The northern portion of the Region remains mostly rural. The Region has experienced population and housing growth over the last few decades, especially on the outskirts of Green Bay and in Door County, and is projected to continue to experience growth in the coming years.

In the Upper Lake Michigan Coastal Region, population is somewhat older than the rest of the state and is projected to continue to age in the coming years. Income, housing values, and education rates vary within the Region, with the northern counties (Marinette and Oconto) having low rates, and Brown County and Door County having high rates of college education, housing values, and median income. Seasonal housing and tourism are significant factors to consider in measuring demand for outdoor recreation in Door, Marinette, and Oconto Counties.

Based on the information shown in this report and from survey data that relates demographic characteristics to participation in outdoor recreational activities (NSRE 2000-2004), we can make some assumptions about the types of outdoor recreation that might be popular in the Upper Lake Michigan Coastal Region and how this relates to geographic and demographic characteristics of the Region. Geographically, we might expect rates of participation in open water and snow/ice related activities to be high because of the access to Lake Michigan and because the Region is located in the northern part of the state that has colder temperatures and more snow in the winter months.

Demographically, we might expect relatively high participation rates in activities associated with high income and education on the outskirts of Green Bay and in Door County. These activities might include: hiking, golf, nature-based education, visiting historic sites, viewing nature, cross country skiing, kayaking, sailing, canoeing, boating, visiting beaches, bicycling, walking for pleasure, and mountain biking. In Marinette and northern Oconto Counties where income and education rates are low and the population is mostly rural, participation in snowmobiling, paintball games, driving off-road, driving for pleasure, and ice fishing might be popular relative to other areas.

It is important to note that in areas with a large contingent of seasonal housing, participation in outdoor recreation will be impacted by characteristics of seasonal residents, as well as full-time residents. Seasonal residents tend to differ dramatically from full-time residents, particularly in terms of income and education. Seasonal residents (usually clustered around lakes) might be expected to participate most in water-based activities.

National Survey on Recreation and the Environment (NSRE): 2000-2004. Versions 1-18 (except 12 & 17), N=2935. Interview dates: 7/99 to 11/04. The Interagency National Survey Consortium, Coordinated by the USDA Forest Service, Recreation, Wilderness, and Demographics Trends Research Group, Athens, GA, the Human Dimensions Research Laboratory, University of Tennessee, Knoxville, TN.



Applied Population Lab and Wisconsin Department of Natural Resources

Contact: *Richelle Winkler, Applied Population Lab, rwinkler@ssc.wisc.edu
Jeff Prey, Wisconsin Dept. of Natural Resources, Jeff.Prey@dnr.state.wi.us*

